

**SYSTEM FOR INTEGRATING AN INTELLIGENT DOCKING STATION
WITH A HANDHELD PERSONAL COMPUTER**

ABSTRACT

The invention transfers a data element from a device to a handheld computer.

In general, the method receives a device-based data element at a docking station based co-processor, performs a driver conversion to convert the device-based data element into a bus-enabled data element, and places the bus-enabled data element on a handheld compatible bus. The method may also transform a data packet by detecting an input packet, retrieving a packet identifier (ID) from the input packet, and dispatching the input packet to a device driver based on the packet ID, the device driver capable of converting the input packet from a handheld computer packet type to a device packet type. The invention is also the systems that enable the method.

As a device, the invention is an intelligent docking station. The intelligent docking station includes a co-processor capable of converting a hand held-based data element into a device enabled data element, a bus interface coupled to the co-processor, and a port coupled to the co-processor. The invention is also a system that incorporates the intelligent docking station.